

**SAFETY DATA SHEET**

according to the (US) Hazard Communication Standard (29 CFR 1910.1200)

Revision Date 11/13/2019

Version 1.1

**SECTION 1. Identification****Product identifier**

Product number CX0574  
Product name Celite® 545 Diatomaceous Earth

**Relevant identified uses of the substance or mixture and uses advised against**

Identified uses Reagent for analysis

**Details of the supplier of the safety data sheet**

Company EMD Millipore Corporation | 400 Summit Drive | Burlington | Massachusetts 01803 | United States of America | General Inquiries: +1 800-645-5476 | Monday to Friday, 9:00 AM to 4:00 PM Eastern Time (GMT-5)  
MilliporeSigma is a business of Merck KGaA, Darmstadt, Germany.

**Emergency telephone** 800-424-9300 CHEMTREC (USA)  
+1-703-527-3887 CHEMTREC (International)  
24 Hours/day; 7 Days/week

**SECTION 2. Hazards identification****GHS Classification**

Specific target organ systemic toxicity - repeated exposure, Category 1, Inhalation, Lungs, H372

For the full text of the H-Statements mentioned in this Section, see Section 16.

**GHS-Labeling**

*Hazard pictograms*



*Signal Word*  
Danger

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## *Hazard Statements*

H372 Causes damage to organs (Lungs) through prolonged or repeated exposure if inhaled.

## *Precautionary Statements*

P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.  
P264 Wash skin thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P314 Get medical advice/ attention if you feel unwell.  
P501 Dispose of contents/ container to an approved waste disposal plant.

## **Other hazards**

None known.

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## **SECTION 3. Composition/information on ingredients**

Chemical nature Mixture of inorganic compounds

### **Hazardous ingredients**

*Chemical name (Concentration)*

CAS-No.

*Cristobalite, respirable ( $\geq 30\%$  -  $< 50\%$ )*

14464-46-1

Exact percentages are being withheld as a trade secret.

*Diatomaceous earth (Calcined), respirable ( $\geq 30\%$  -  $< 50\%$ )*

68855-54-9

Exact percentages are being withheld as a trade secret.

*Quartz, non-respirable ( $\geq 1\%$  -  $< 5\%$ )*

14808-60-7

Exact percentages are being withheld as a trade secret.

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## **SECTION 4. First aid measures**

### **Description of first-aid measures**

*Inhalation*

After inhalation: fresh air. Call in physician.

*Skin contact*

In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower.

*Eye contact*

After eye contact: rinse out with plenty of water. Remove contact lenses.

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### *Ingestion*

After swallowing: immediately make victim drink water (two glasses at most).  
Consult a physician.

Never give anything by mouth to an unconscious person.

### **Most important symptoms and effects, both acute and delayed**

Pneumokoniosis (silicosis)

### **Indication of any immediate medical attention and special treatment needed**

No information available.

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## **SECTION 5. Fire-fighting measures**

### **Extinguishing media**

#### *Suitable extinguishing media*

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

#### *Unsuitable extinguishing media*

For this substance/mixture no limitations of extinguishing agents are given.

### **Special hazards arising from the substance or mixture**

Not combustible.

Ambient fire may liberate hazardous vapors.

### **Advice for firefighters**

#### *Special protective equipment for fire-fighters*

Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

#### *Further information*

Suppress (knock down) gases/vapors/mists with a water spray jet.

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## **SECTION 6. Accidental release measures**

### **Personal precautions, protective equipment and emergency procedures**

Advice for non-emergency personnel: Avoid generation and inhalation of dusts in all circumstances. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.

Advice for emergency responders:

Protective equipment see section 8.

### **Environmental precautions**

No special precautionary measures necessary.

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## Methods and materials for containment and cleaning up

Observe possible material restrictions (see sections 7 and 10). Take up dry. Dispose of properly. Clean up affected area. Avoid generation of dusts.

## SECTION 7. Handling and storage

### Precautions for safe handling

Observe label precautions.

### Conditions for safe storage, including any incompatibilities

Tightly closed. Dry. Keep in a well-ventilated place. Keep locked up or in an area accessible only to qualified or authorized persons.

Store at room temperature.

## SECTION 8. Exposure controls/personal protection

### Exposure limit(s)

#### Components

Basis	Value	Threshold limits	Remarks
<i>Cristobalite, respirable 14464-46-1</i>			
ACGIH	Time Weighted Average (TWA):	0.025 mg/m <sup>3</sup>	Form of exposure: Respirable fraction.
Z1A	Time Weighted Average (TWA):	0.05 mg/m <sup>3</sup>	Form of exposure: Respirable dust.
	Time Weighted Average (TWA):	0.05 mg/m <sup>3</sup>	The exposure limit is calculated from the equation, $5/(\%SiO_2+2)$ , using a value of 100% SiO <sub>2</sub> . Lower percentages of SiO <sub>2</sub> will yield higher exposure limits. Form of exposure: Respirable.
	Time Weighted Average (TWA):	1.2millions of particles per cubic foot of air	The exposure limit is calculated from the equation, $125/(\%SiO_2+5)$ , using a value of 100% SiO <sub>2</sub> . Lower values of % SiO <sub>2</sub> will give higher exposure limits. Form of exposure: Respirable.
NIOSH/GUIDE	Recommended exposure limit (REL):	5 mg/m <sup>3</sup>	Form of exposure: Fiber, total
	Recommended exposure limit (REL):	3fibers/cm <sup>3</sup>	Form of exposure: Dust.
	Recommended exposure limit (REL):	5 mg/m <sup>3</sup>	Form of exposure: fibers, total dust
	Recommended exposure limit (REL):	3fibers/cm <sup>3</sup>	Form of exposure: Fiber.
	Recommended exposure limit (REL):	6 mg/m <sup>3</sup>	
OSHA_TRANS	PEL:	0.05 mg/m <sup>3</sup>	

*Diatomaceous earth (Calcined), respirable 68855-54-9*

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NIOSH/GUIDE	Recommended exposure limit (REL):	6 mg/m <sup>3</sup>	
	Time Weighted Average (TWA):	20millions of particles per cubic foot of air	
	Time Weighted Average (TWA):	0.8 mg/m <sup>3</sup>	The exposure limit is calculated from the equation, $80/(\%SiO_2)$ , using a value of 100% SiO <sub>2</sub> . Lower values of % SiO <sub>2</sub> will give higher exposure limits.
<i>Quartz, non-respirable 14808-60-7</i>			
ACGIH	Time Weighted Average (TWA):	0.025 mg/m <sup>3</sup>	Form of exposure: Respirable fraction.
NIOSH/GUIDE	Recommended exposure limit (REL):	0.05 mg/m <sup>3</sup>	Form of exposure: Respirable dust.
Z1A	Time Weighted Average (TWA):	0.1 mg/m <sup>3</sup>	Form of exposure: Respirable dust.
	Time Weighted Average (TWA):	0.1 mg/m <sup>3</sup>	The exposure limit is calculated from the equation, $10/(\%SiO_2+2)$ , using a value of 100% SiO <sub>2</sub> . Lower percentages of SiO <sub>2</sub> will yield higher exposure limits. Form of exposure: Respirable.
	Time Weighted Average (TWA):	2.4millions of particles per cubic foot of air	The exposure limit is calculated from the equation, $250/(\%SiO_2+5)$ , using a value of 100% SiO <sub>2</sub> . Lower percentages of SiO <sub>2</sub> will yield higher exposure limits. Form of exposure: Respirable.
OSHA_TRANS	PEL:	0.05 mg/m <sup>3</sup>	

## Engineering measures

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

## Individual protection measures

Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled. The chemical resistance of the protective equipment should be inquired at the respective supplier.

## Hygiene measures

Immediately change contaminated clothing. Apply skin- protective barrier cream.  
Wash hands and face after working with substance.

## Eye/face protection

Safety glasses

## Hand protection

full contact:

Glove material: Nitrile rubber  
Glove thickness: 0.11 mm  
Break through time: > 480 min

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splash contact:

Glove material: Nitrile rubber  
Glove thickness: 0.11 mm  
Break through time: > 480 min

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374, for example KCL 741 Dermatril® L (full contact), KCL 741 Dermatril® L (splash contact).

This recommendation applies only to the product stated in the safety data sheet and supplied by us as well as to the purpose specified by us. When dissolving in or mixing with other substances and under conditions deviating from those stated in EN374 please contact the supplier of CE-approved gloves (e.g. KCL GmbH, D-36124 Eichenzell, Internet: [www.kcl.de](http://www.kcl.de)).

*Other protective equipment:*  
protective clothing

*Respiratory protection*

required when dusts are generated.

Recommended Filter type: Filter P 2 (acc. to DIN 3181) for solid and liquid particles of harmful substances

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are performed according to the instructions of the producer.

These measures have to be properly documented.

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## SECTION 9. Physical and chemical properties

Physical state	powder
Color	off-white
Odor	No strong odor known.
Odor Threshold	No information available.
pH	No information available.
Melting point	No information available.
Boiling point	No information available.
Flash point	No information available.
Evaporation rate	No information available.

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Flammability (solid, gas)	The product is not flammable.
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Vapor pressure	No information available.
Relative vapor density	No information available.
Density	No information available.
Relative density	No information available.
Water solubility	insoluble
Partition coefficient: n-octanol/water	No information available.
Autoignition temperature	No information available.
Decomposition temperature	No information available.
Viscosity, dynamic	No information available.
Explosive properties	Not classified as explosive.
Oxidizing properties	none

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## SECTION 10. Stability and reactivity

### Reactivity

See below

### Chemical stability

The product is chemically stable under standard ambient conditions (room temperature) .

### Possibility of hazardous reactions

Dangerous reactions are not expected handling the product according to its intended use.

### Conditions to avoid

no information available

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**Incompatible materials**  
no information available

**Hazardous decomposition products**  
in the event of fire: See section 5.

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## SECTION 11. Toxicological information

### Information on toxicological effects

*Likely route of exposure*  
Inhalation, Eye contact, Skin contact, Ingestion

*Target Organs*  
Eyes  
Respiratory system

*Acute inhalation toxicity*

Symptoms: Chronic intoxication:, Pneumokoniosis (silicosis)

*Specific target organ systemic toxicity - single exposure*  
The substance or mixture is not classified as specific target organ toxicant, single exposure.

*Specific target organ systemic toxicity - repeated exposure*  
Causes damage to organs through prolonged or repeated exposure if inhaled.  
Routes of exposure: Inhalation  
Target Organs: Lungs

*Aspiration hazard*  
Regarding the available data the classification criteria are not fulfilled.

### Carcinogenicity

IARC	Group 1: Carcinogenic to humans Diatomaceous earth 68855-54-9 (Calcined), respirable Quartz, non-respirable 14808-60-7 Cristobalite, respirable 14464-46-1
OSHA	No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.
NTP	Known carcinogen. Quartz, non-respirable 14808-60-7 Cristobalite, respirable 14464-46-1 Anticipated carcinogen. Cristobalite, respirable 14464-46-1
ACGIH	A2: Suspected human carcinogen

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Quartz, non-respirable 14808-60-7

Cristobalite, respirable 14464-46-1

## Further information

Other dangerous properties can not be excluded.

Handle in accordance with good industrial hygiene and safety practice.

## Components

### *Cristobalite, respirable*

No information available.

### *Diatomaceous earth (Calcined), respirable*

#### *Acute oral toxicity*

LD50 Rat: > 2,000 mg/kg

OECD Test Guideline 401

#### *Skin irritation*

In vitro study

Result: negative

OECD Test Guideline 431

#### *Eye irritation*

In vitro study

Result: negative

#### *Sensitization*

Local lymph node assay (LLNA) Mouse

Result: negative

Method: OECD Test Guideline 429

#### *Germ cell mutagenicity*

##### *Genotoxicity in vitro*

Ames test

Escherichia coli/Salmonella typhimurium

Result: negative

Method: OECD Test Guideline 471

### *Quartz, non-respirable*

No information available.

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## SECTION 12. Ecological information

### Ecotoxicity

No information available.

### Persistence and degradability

No information available.

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### **Bioaccumulative potential**

No information available.

### **Mobility in soil**

No information available.

### **Components**

#### *Cristobalite, respirable*

No information available.

#### *Diatomaceous earth (Calcined), respirable*

##### *Toxicity to bacteria*

activated sludge: > 1,000 mg/l; 3 h

OECD Test Guideline 209 (above the solubility limit in the test medium)

#### *Quartz, non-respirable*

No information available.

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### **SECTION 13. Disposal considerations**

The information presented only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations. Disposal should be in accordance with applicable regional, national and local laws and regulations.

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### **SECTION 14. Transport information**

#### **Land transport (DOT)**

Not classified as dangerous in the meaning of transport regulations.

#### **Air transport (IATA)**

Not classified as dangerous in the meaning of transport regulations.

#### **Sea transport (IMDG)**

Not classified as dangerous in the meaning of transport regulations.

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## SECTION 15. Regulatory information

### United States of America

#### **SARA 313**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

#### **SARA 302**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

#### **Clean Water Act**

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

#### **DEA List I**

Not listed

#### **DEA List II**

Not listed

### US State Regulations

#### **Massachusetts Right To Know**

##### *Components*

Cristobalite, respirable

Diatomaceous earth (Calcined), respirable

Quartz, non-respirable

#### **Pennsylvania Right To Know**

##### *Components*

Cristobalite, respirable

Diatomaceous earth (Calcined), respirable

Quartz, non-respirable

#### **New Jersey Right To Know**

##### *Components*

Cristobalite, respirable

Quartz, non-respirable

#### **California Prop 65 Components**

WARNING: this product contains a chemical known in the State of California to cause cancer.

##### *Components*

Diatomaceous earth (Calcined), respirable

Quartz, non-respirable

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Cristobalite, respirable

## Notification status

TSCA: All components of the product are listed in the TSCA-inventory.  
DSL: All components of this product are on the Canadian DSL

## SECTION 16. Other information

### Training advice

Provide adequate information, instruction and training for operators.

### Labeling

*Hazard pictograms*



*Signal Word*

Danger

*Hazard Statements*

H372 Causes damage to organs (Lungs) through prolonged or repeated exposure if inhaled.

*Precautionary Statements*

Response

P314 Get medical advice/ attention if you feel unwell.

### Full text of H-Statements referred to under sections 2 and 3.

H372 Causes damage to organs through prolonged or repeated exposure if inhaled.

### Key or legend to abbreviations and acronyms used in the safety data sheet

Used abbreviations and acronyms can be looked up at [www.wikipedia.org](http://www.wikipedia.org).

Revision Date 11/13/2019

The branding on the header and/or footer of this document may temporarily not visually match the product purchased as we transition our branding. However, all of the information in the document regarding the product remains unchanged and matches the

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product ordered. For further information please contact [mlsbranding@sial.com](mailto:mlsbranding@sial.com).

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